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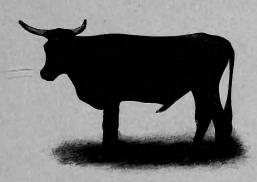
Give Stock Farming in

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Published by the Land and Industrial Department Florida East Coast Railway Company (Hagler System)



LIVESTOCK FARMING INFLORIDA ALONG THE LINES OF THE FLORIDA EAST COAST RAILWAY The Native Scrub—The Basis of Successful Livestock Farming in Florida Published by the LAND AND INDUSTRIAL DEPARTMENT of the FLORIDA EAST COAST RAILWAY (Flagler System) J. E. INGRAHAM, Vice-President Saint Augustine, Florida



Publisher's Note

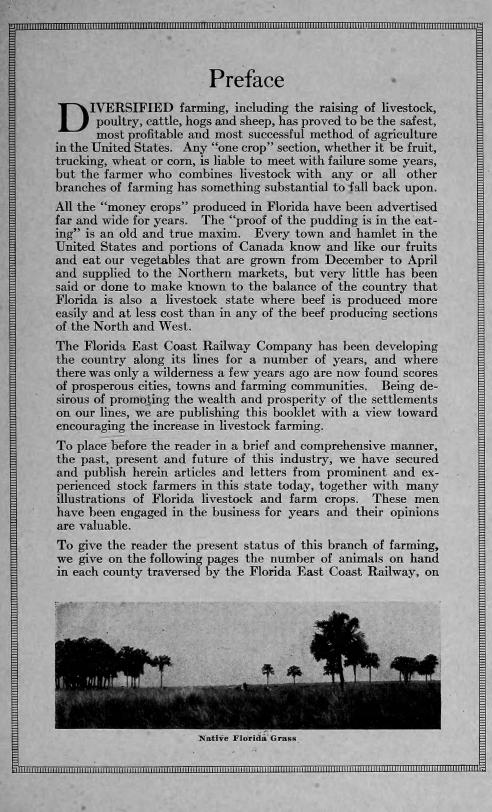
The purpose of this booklet is to aid in the development of Florida's unparalleled agricultural resources. After years of careful observation and investigation the publishers have become convinced that the livestock industry is the correct basis upon which to build substantially one of the greatest agricultural states in the Union. In making this statement it is not intended to minimize the wonderful advantages and opportunities for profit Florida offers to the fruil grower and the truck gardener. On the contrary, Florida's growth as a livestock state will mean a corresponding growth of the trucking and fruit growing interests. It means a vast increase in capital for the general development of the state, besides the greater fertility of the soil that will result.

The information contained herein is authentic. It comes from some of the best authorities in the country, both in and out of Florida. It has been carefully edited and prepared with the idea of presenting the important facts in a clear and concise manner. The photographs, which were all made in Florida, are labelled exactly where they were taken and most of them were made expressly for this booklet.

The publishers believe that the array of facts and illustrations herein should convince the livestock business in Florida will yield as great or greater profits than he has ever before received. The time to engage in the livestock industry in Florida is at hand.

NOV 12 1914

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July 1st, 1 Commission	1912, as ner of A	given in th	ne twelfth I the State o	Biennial Re f Florida:	eport of the
County	Horses	Native Stock Cattle	Graded Cattle and Milk Cows	Hogs	Sheep
Duval	2,639	15,134	2,123	17,401	500
St. Johns Putnam	1,483	28,101	1,462	24,468	4,105
Volusia	1,030 2,044	13,993 28,318	1,320	13,563	9
Brevard	457	10.667	(no rpt.) 210	17,096 5,580	12,430 (no rpt.)
Seminole)		10,001	210	0,000	(no rpt.)
orange	2,169	34,945	1,964	8,189	1,680
Osceola	(no rpt.)	(est.) 75,000	(no rpt.)	(no rpt.)	(no rpt.)
St. Lucie Palm Beach	346 249	19,277 3,135	$\frac{157}{270}$	3,784	55
Dade	847	3,135 78	1,392	1,138 949	(none)
Total	11,264	228,648	8,898	92.168	(none) 18,779
		named		02,100	10,779
H the S	tate of]	V. A. McRae Florida. All	reports cov	er the peri	od hotwoon
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Field crops, ac Vegetable and Total acreage in Total Eight Crops Vegetable and Fruit products Livestock on houltry and products Miscellaneous	res garden pro in cultivat al Valu garden pro iand coducts s products	oducts, acres	orida Fa	rm Proc	937,2 63,2 1,000,5 lucts \$,056,6 9,689,7 23,510,4 3,527,2 2,518,2

Field crops, acres Vegetable and garden products, acres	937,264 63,241
Total acreage in cultivation	1.000.505

Field Crops	\$16.051.730
Vegetable and garden products	8 056 685
Trutt products	9 689 774
Livestock on hand	23 510 470
Poultry and products	3 527 286
Dany products	2.518.241
Miscenaneous products	133,713
Total	\$63,487,908

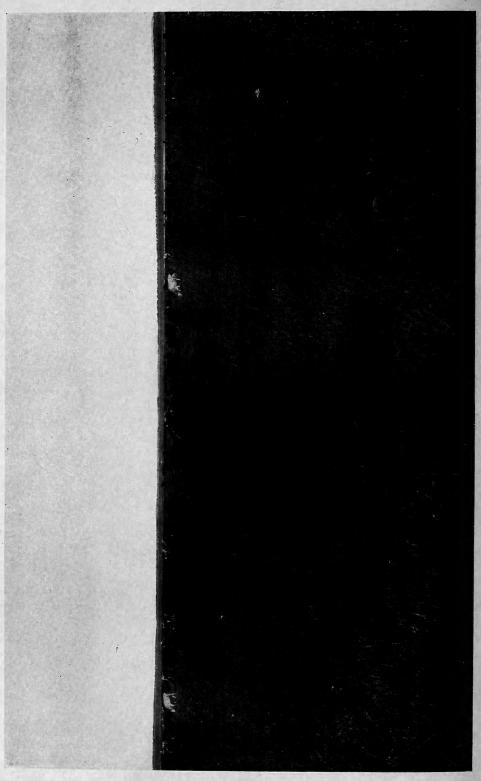


Field C	op Production is	n Florida
CornOats	5,453,936 bushels 287,708 bushels	\$4,455,161 232,250
Rve	1.727 bushels	4.250
Rice Pagnute	14,737 bushels 1,534,736 bushels	22,609 1 630 275
Hay, native grasses	46,650 tons	516,351
Millet	918 tons	16,057
Cassava	923 tons	
Cabbage	193.729 crates	295,279
Irish potatoes	1,080,215 bushels 98,403 crates	1,640,882 133,183
Sugar cane 67 846	harrels syrun and 2 933 nou	
Velvet beans $_{-}$ $_{-}$ $_{-}$ $_{320,930}$	bushels and 2,526 ton	s hay 645,488
Field peas 76,885	bushels and 9,849 ton	s hay 330,350
tobacco crop at \$586,607 fruit crops not used for s	include the cotton crop, va .00; and a large variety of tock feed which were valued	well known vegetable and at nearly \$20,000,000.00.
Livestoc	k on Hand July	1St, 1912
Horses	48,418	\$6,009,142
Colts Mules	1,942	115,401 5,396,601
Mule colts	670	78,920
Asses and Jennets	248	15,361 292,997
Work Oxen,	9,320 ls 772,076	7,224,544
Thoroughbred cattle	14,188	489,089
1/2 grades and up }	39,621	1 215 849
Hogs	661,437	1,858,915
Sheep and lambs	114,501	287,699
Goats Poultry	43,9982,793,932	43,854 $1,370,129$
	Miscellaneous	00 1FF 1FF
Eggs sold and used Milk sold and used	8,175,251 dozens 8,131,761 gallons 8	2,166,018
Butter sold and used \dots	1,133,887 pounds	351,964
Cheese sold and used Beeswax	1,872 pounds 25,280 pounds	259 4,768
Bees	20,577 stands	
Honey	675,718 pounds	72,363
vvool, spring clip,	261,017 pounds and 8	56,582 56,582
Ox	the Range in Seminole Cou	nty

·	OIL LIGHTON O'MA	, 100, 1011
	Number	Value
Horses	48,418	\$6,009,142
		115,401
Mules	32,352	5,396,601
Mule colts	670	78,920
Asses and Jennets	248	15,361
Work Oxen,	9,320	292,997
Stock cattle, Native breeds.	772,076	7,224,544
Thoroughbred cattle	-1/:188	489,089
½ grades and up \	11,100	100,000
Cows for milk only	39,621	1,215,842
Hogs	661,437	1,858,915
Sheep and lambs		
Goats		43,854
Poultry		
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Eggs sold and used	8.175.251	dozens	\$2,157,157
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Butter sold and used	1,133,887	pounds	351,964
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Beeswax		pounds.	4,768
Bees	20,577	stands	
Honey	675,718	pounds.	72,363
Wool, spring clip,	261.017	pounds and 83,344 fleeces	56,582





Native Cattle on the Range Northeast of Chuluota, Seminole County

Introduction



Introduction

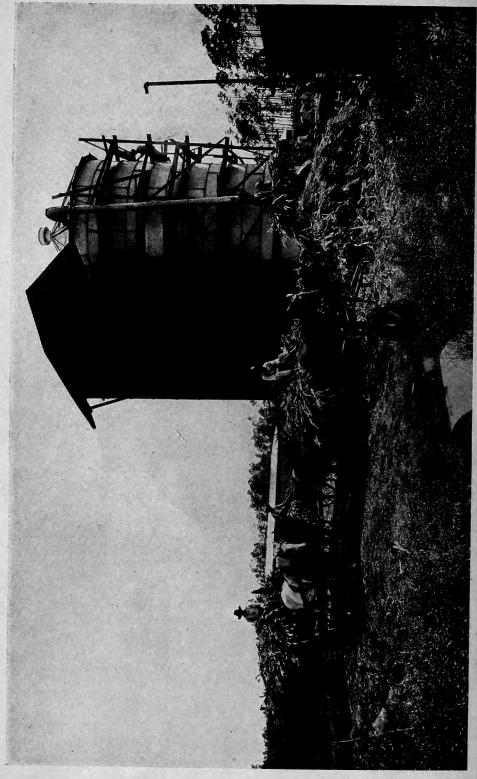
By Hon. J. N. Whitner, Manager of Tosohatchee Ranch, Sanford, Florida

HE beef supply is now one of the recognized world problems: The advancing price of land and the need for farms and orchards is rapidly reducing the area of grazing land, thereby making a shortage in heef with resulting high prices. The 1913 Year Book of the Department of Agriculture says the census of 1910 shows "a decrease in ten years of 9,385,343 head or 18.5 per cent. of all eattle other than milch cows." Since the increase in population for the same decade in the United States was twenty per cent., we find the startling decrease in the supply of beef of 38 per cent. per capita.

The Year Book says "the question of providing enough beef to supply the demand is now recognized as one of world-wide importance," and further discussing the subject devotes a section of the book, beginning as follows:

"Possibilities of the South—There is one section that can produce more cattle and produce them more cheaply than any other section of the whole country, for the lands are still cheap, the grazing is good, the pasture season is long, feeds can be produced at a minimum cost, and inexpensive shelter only is required. That section of the country is the South."

In Florida no shelter is required and the pasture season is perpetual, from January to January.



Filling New Steel Silo with Corn Ensilage on Hastings Cold Storage Company's Farm near Hastings, St. Johns County [Scaffolding around the silo was being used by workmen completing its construction]

Why Florida Is Adapted to Raising Livestock

E are indebted to Mr. W. A. McRae, Florida's commissioner of agriculture, for the following:

Tallahassee, Florida, September 12th, 1914.

Hon. J. E. Ingraham, St. Augustine, Florida.

Dear Sir:

There are many reasons why Florida is adapted to the successful growing of livestock of all kinds, almost without limit.

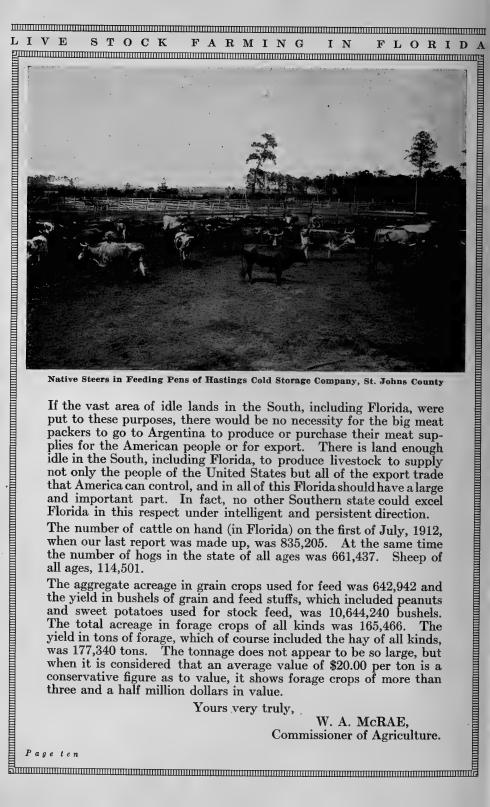
Among the principal reasons is its unlimited and unfailing supply of water, which is absolutely essential in every country to the successful production of livestock of all kinds. Where water is not running from natural sources, there is hardly a locality in the state that cannot be made to artificially produce water enough for all reasonable purposes, whether it be stock raising or other purposes. Another which is equally as important is the short feeding and sheltering period necessary in this state as compared with other states of the Union, it being necessary, and that in parts of the state only, to feed no more than three months and to shelter, possibly all told, no more than six weeks in the entire year.

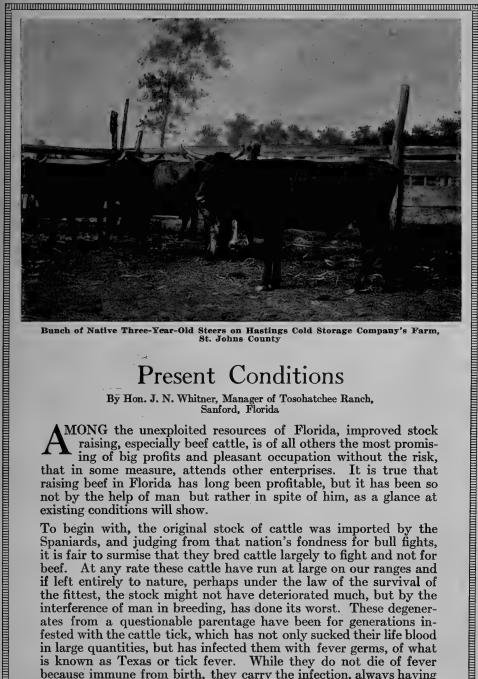
Another and as great an advantage in this state is the adaptability of the soils of Florida to the production of all kinds of forage crops and at less cost of production than elsewhere. Of course the climate has much to do with this as well as the rainfall and the soil, but because of these conditions there is no section of the United States that can surpass Florida as a livestock producing country.

Of the entire area of Florida there are only about 3,000,000 acres in farms and under farming control. There are not less than 30,000,000 acres that can be used to a greater or less extent for forage production or grazing purposes for livestock. This will show that Florida has within her boundaries the greatest grazing region east of the Mississippi river, and practically an unlimited capacity to produce forage crops to supply the livestock that could be grown upon it.

The number of livestock of all kinds in the state is about 2,000,000 in round numbers, and the value of these is \$25,000,000. Instead of this small number there should be not less than 10,000,000 head of livestock growing in Florida, in which case the value instead of being \$25,000,000, should be \$250,000,000 to \$300,000,000. This may sound large, but it is entirely practical and reasonable and can be easily attained.

STOCK





Bunch of Native Three-Year-Old Steers on Hastings Cold Storage Company's Farm, St. Johns County

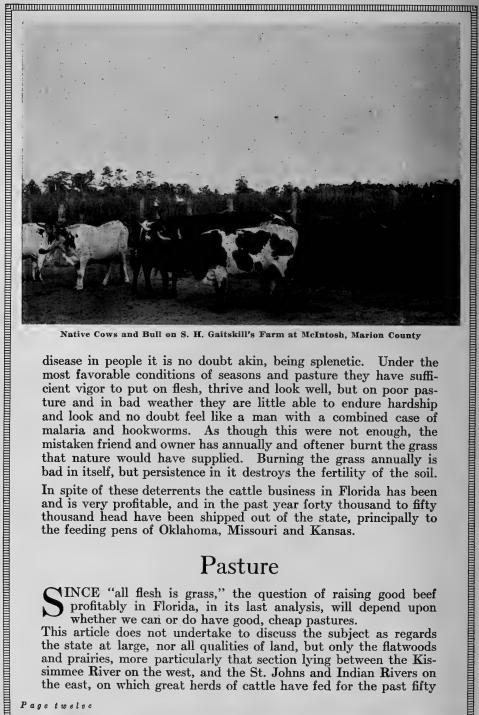
Present Conditions

By Hon. J. N. Whitner, Manager of Tosohatchee Ranch, Sanford, Florida

MONG the unexploited resources of Florida, improved stock raising, especially beef cattle, is of all others the most promising of big profits and pleasant occupation without the risk, that in some measure, attends other enterprises. It is true that raising beef in Florida has long been profitable, but it has been so not by the help of man but rather in spite of him, as a glance at existing conditions will show.

To begin with, the original stock of cattle was imported by the Spaniards, and judging from that nation's fondness for bull fights, it is fair to surmise that they bred cattle largely to fight and not for At any rate these cattle have run at large on our ranges and if left entirely to nature, perhaps under the law of the survival of the fittest, the stock might not have deteriorated much, but by the interference of man in breeding, has done its worst. These degenerates from a questionable parentage have been for generations infested with the cattle tick, which has not only sucked their life blood in large quantities, but has infected them with fever germs, of what is known as Texas or tick fever. While they do not die of fever because immune from birth, they carry the infection, always having the same anæmic condition as a human being with malaria, to which

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Native Cows and Bull on S. H. Gaitskill's Farm at McIntosh, Marion County

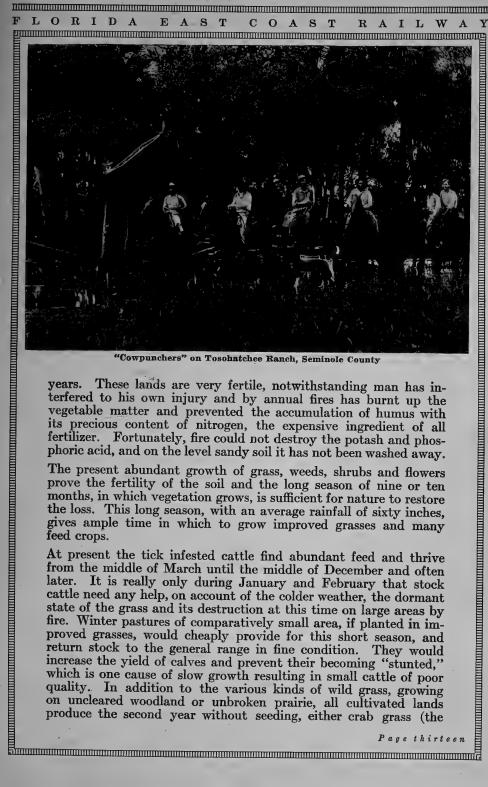
disease in people it is no doubt akin, being splenetic. Under the most favorable conditions of seasons and pasture they have sufficient vigor to put on flesh, thrive and look well, but on poor pasture and in bad weather they are little able to endure hardship and look and no doubt feel like a man with a combined case of malaria and hookworms. As though this were not enough, the mistaken friend and owner has annually and oftener burnt the grass that nature would have supplied. Burning the grass annually is bad in itself, but persistence in it destroys the fertility of the soil.

In spite of these deterrents the cattle business in Florida has been and is very profitable, and in the past year forty thousand to fifty thousand head have been shipped out of the state, principally to the feeding pens of Oklahoma, Missouri and Kansas.

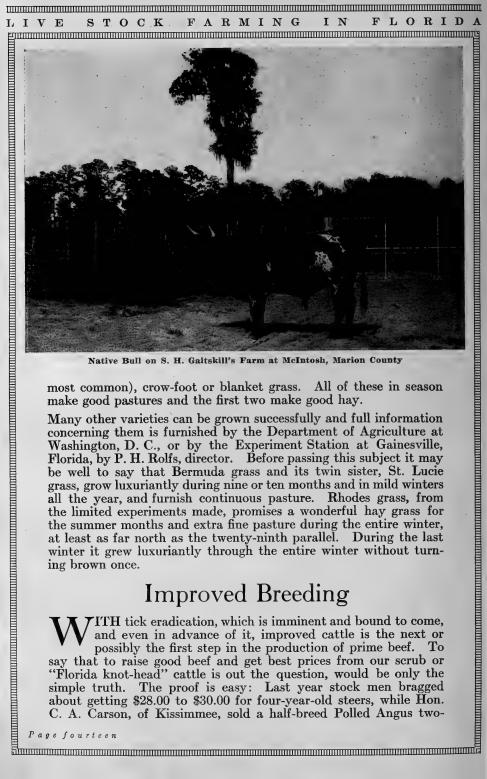
Pasture

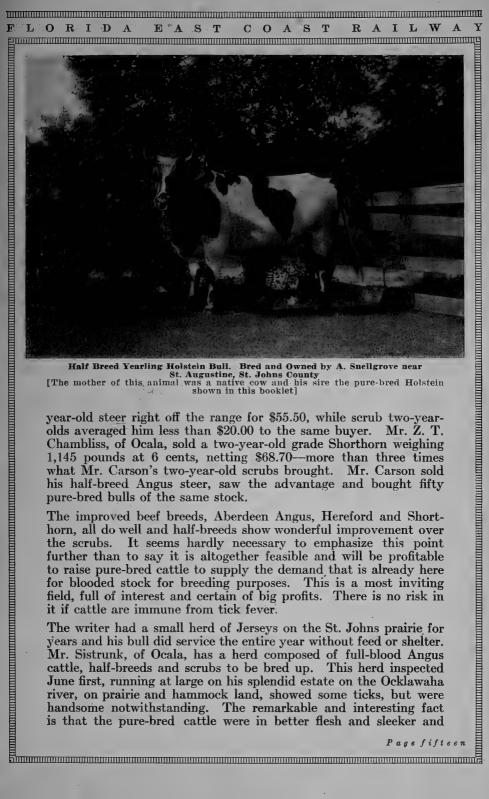
MINCE "all flesh is grass," the question of raising good beef profitably in Florida, in its last analysis, will depend upon whether we can or do have good, cheap pastures.

This article does not undertake to discuss the subject as regards the state at large, nor all qualities of land, but only the flatwoods and prairies, more particularly that section lying between the Kissimmee River on the west, and the St. Johns and Indian Rivers on the east, on which great herds of cattle have fed for the past fifty

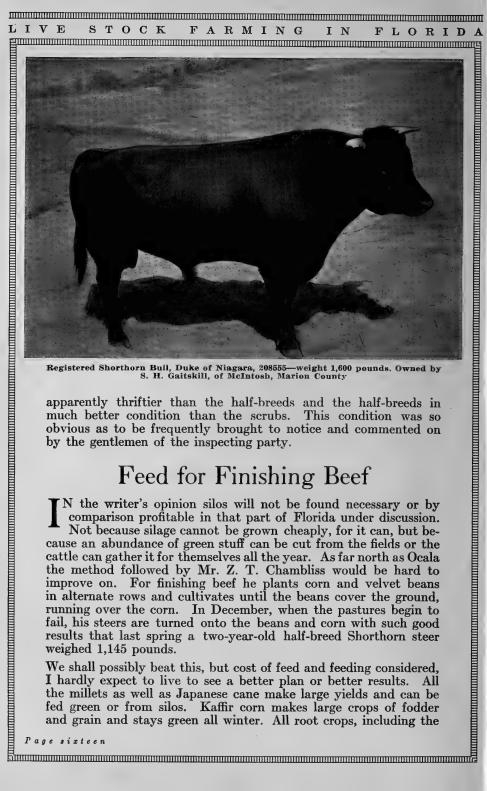


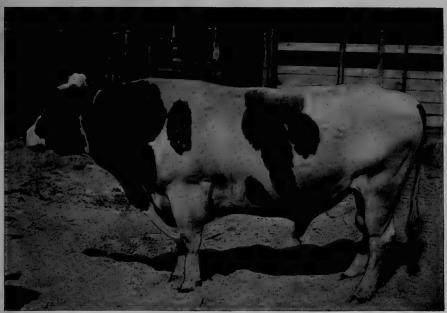
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LIVE TOCK FARMING FLORID IN





Three-Year-Old Thoroughbred Holstein Bull on A. Snellgrove's Dairy Farm near St. Augustine, St. Johns County—Brought to Florida When Three Months Old

"dasheen," make large yields, and where cattle were to be fed, especially dairy cattle, the writer planted mangel wurzel, sugar beets and carrots in October when the cost of cultivation was slight and obtained phenomenal yields, which were fed fresh with good results.

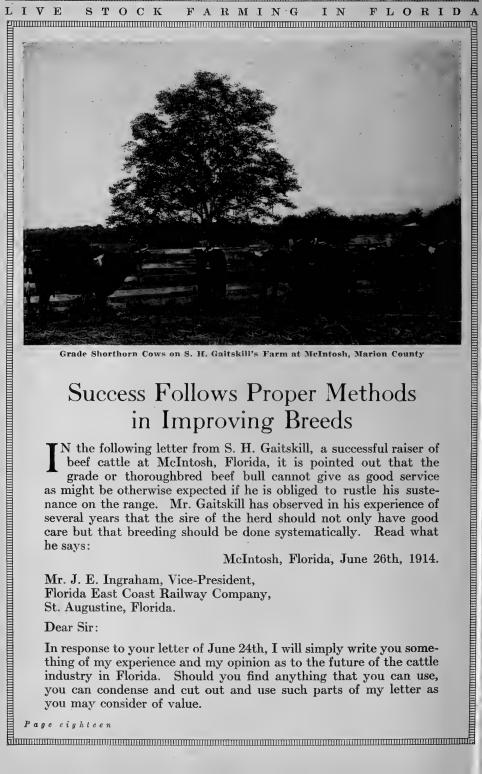
Summing Up

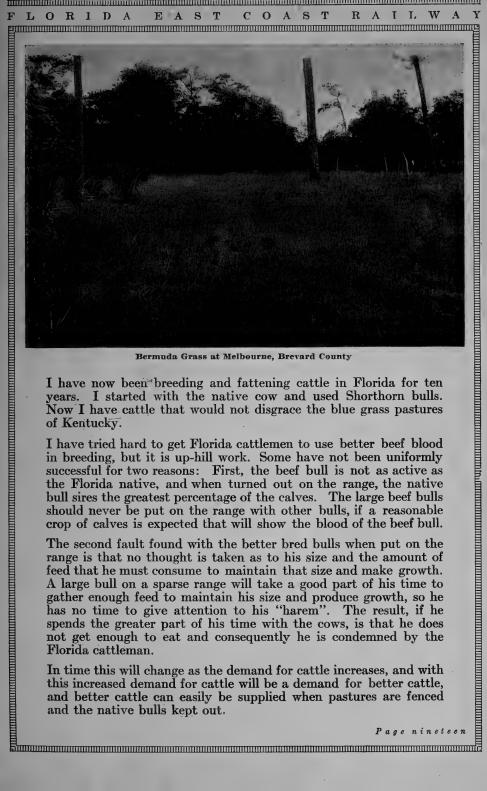
THE cattle business in Florida is universally profitable in spite of conditions that in a colder climate cattle would not be able to withstand. Briefly, we find tick infested, scrub cattle, degenerate from inbreeding, running at large on prairies, which are being damaged by annual fires, often at the wrong season of the year; driven at will by any owner of one cow who drives many to get one—harassed and often dogged to their injury.

Under these conditions the four-year-old steer is worth about \$25.00. With improved conditions the two-year-old brings more than \$50.00. This is not theory, but as quoted in the foregoing, it has been done. It only requires enclosed and protected pastures, free from ticks, thoroughbred bulls at the head of the herd, improved winter pastures held in reserve to bridge over the short winter, and with cheap feed crops grown on the ranch to finish the beef, the world is our market.

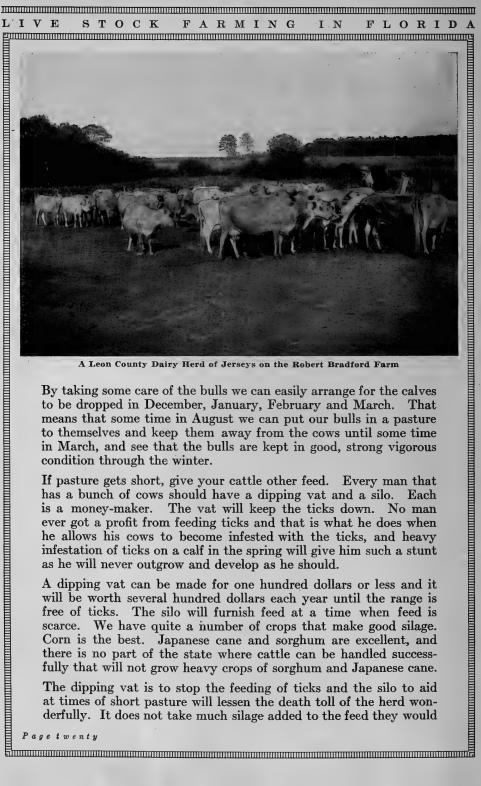
Today these lands and this business offer the most certain profits imaginable. The investment in this land alone is most alluring, but coupled with the beef business is doubly attractive.

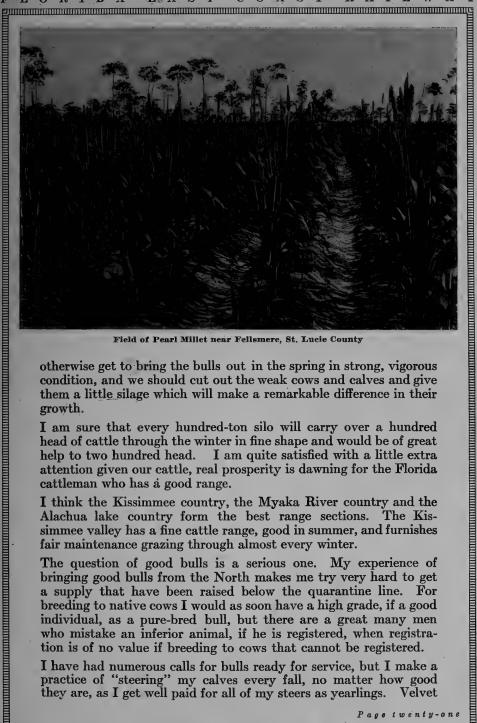
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LIVE STOCK FARMING $I \cdot N$ FL ORID





Field of Pearl Millet near Fellsmere, St. Lucie County

otherwise get to bring the bulls out in the spring in strong, vigorous condition, and we should cut out the weak cows and calves and give them a little silage which will make a remarkable difference in their growth.

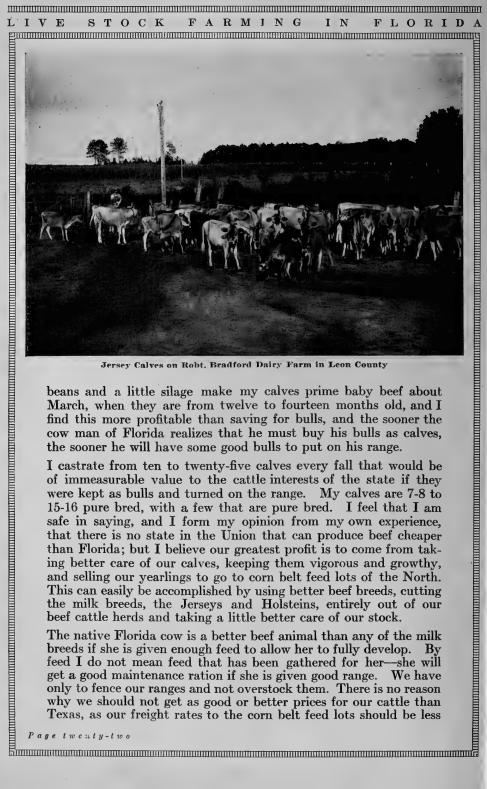
I am sure that every hundred-ton silo will carry over a hundred head of cattle through the winter in fine shape and would be of great help to two hundred head. I am quite satisfied with a little extra attention given our cattle, real prosperity is dawning for the Florida cattleman who has a good range.

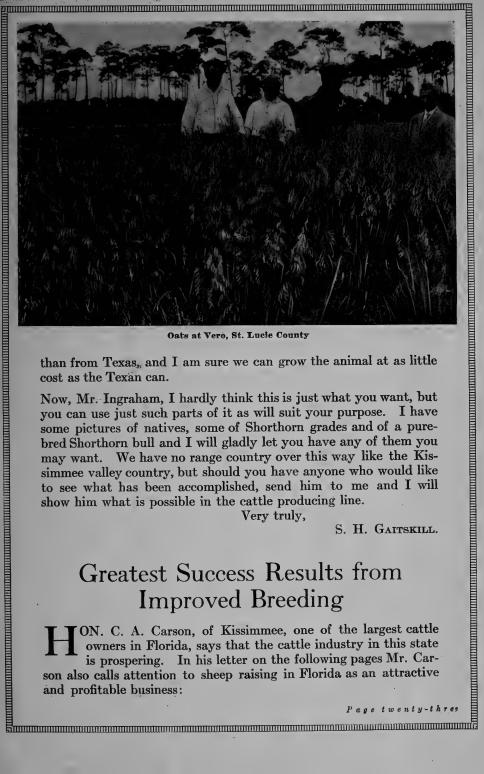
I think the Kissimmee country, the Myaka River country and the Alachua lake country form the best range sections. The Kissimmee valley has a fine cattle range, good in summer, and furnishes fair maintenance grazing through almost every winter.

The question of good bulls is a serious one. My experience of bringing good bulls from the North makes me try very hard to get a supply that have been raised below the quarantine line. For breeding to native cows I would as soon have a high grade, if a good individual, as a pure-bred bull, but there are a great many men who mistake an inferior animal, if he is registered, when registration is of no value if breeding to cows that cannot be registered.

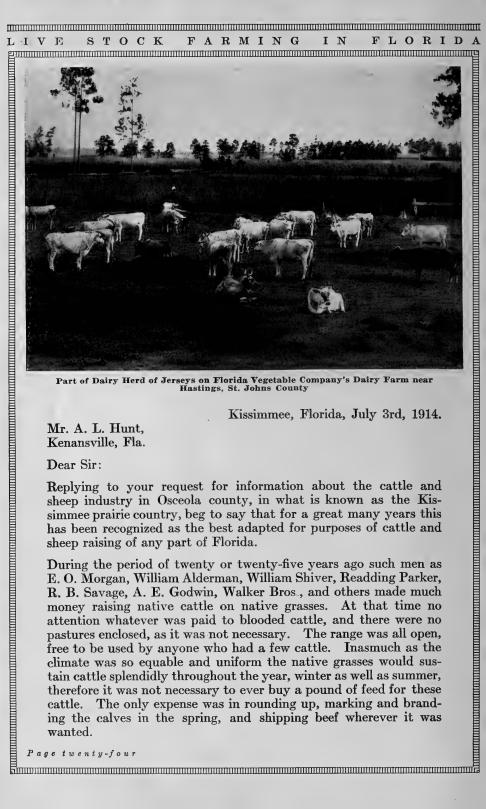
I have had numerous calls for bulls ready for service, but I make a practice of "steering" my calves every fall, no matter how good they are, as I get well paid for all of my steers as yearlings.

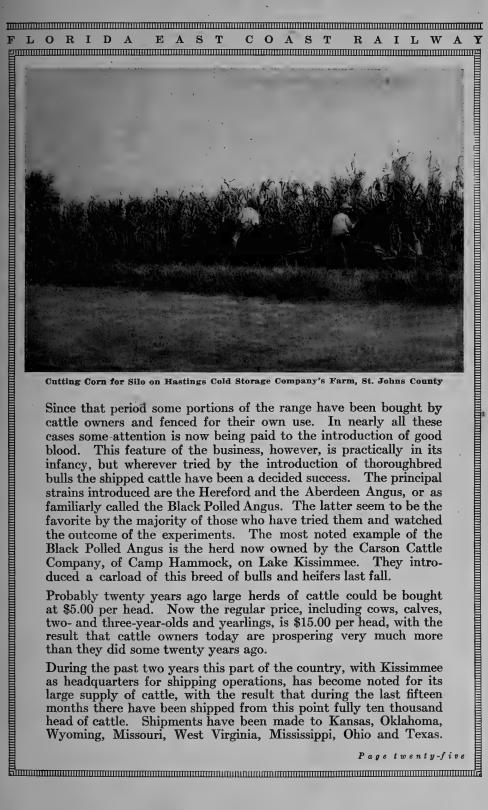
LIVE STOCK FARMING IN

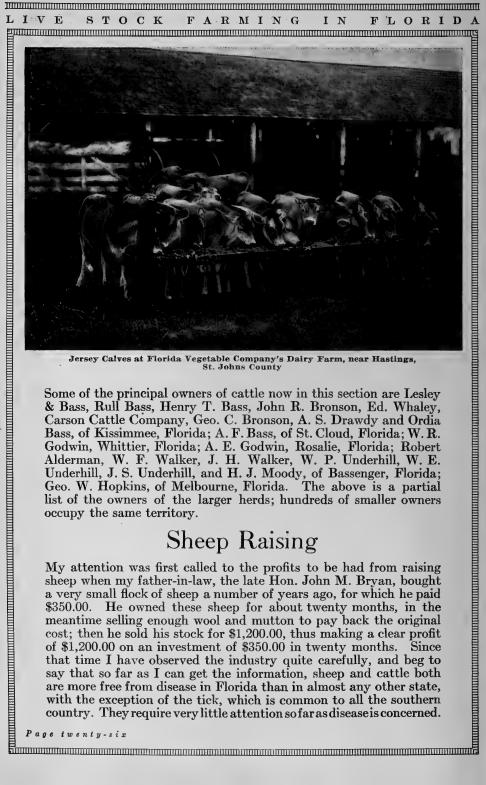


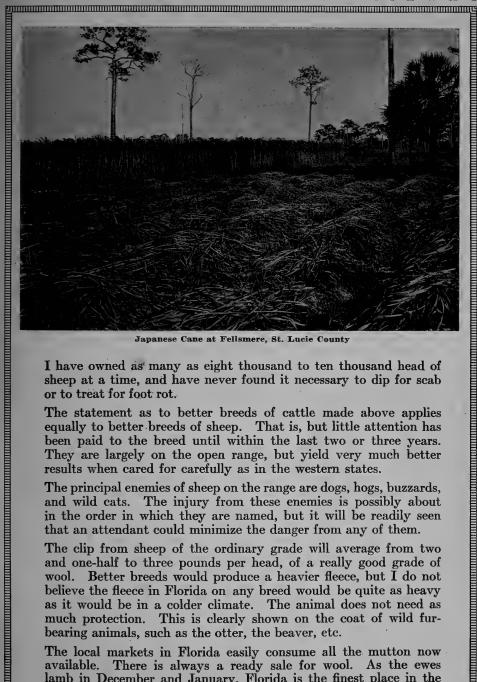


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Japanese Cane at Fellsmere, St. Lucie County

I have owned as many as eight thousand to ten thousand head of sheep at a time, and have never found it necessary to dip for scab or to treat for foot rot.

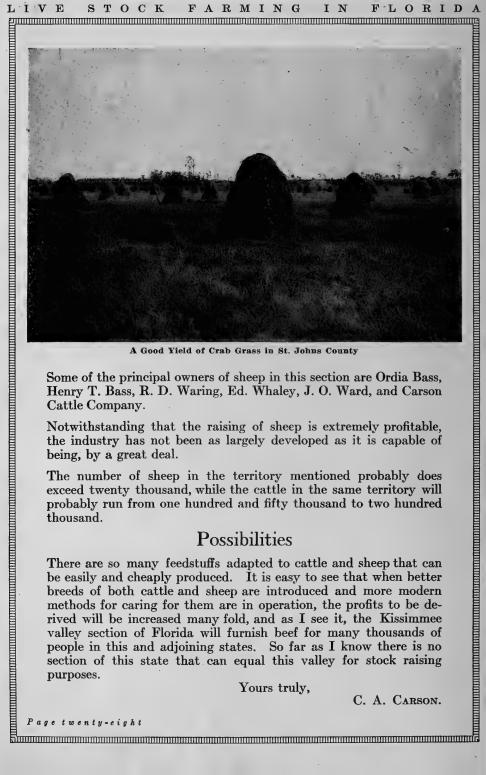
The statement as to better breeds of cattle made above applies equally to better breeds of sheep. That is, but little attention has been paid to the breed until within the last two or three years. They are largely on the open range, but yield very much better results when cared for carefully as in the western states.

The principal enemies of sheep on the range are dogs, hogs, buzzards, and wild cats. The injury from these enemies is possibly about in the order in which they are named, but it will be readily seen that an attendant could minimize the danger from any of them.

The clip from sheep of the ordinary grade will average from two and one-half to three pounds per head, of a really good grade of wool. Better breeds would produce a heavier fleece, but I do not believe the fleece in Florida on any breed would be quite as heavy as it would be in a colder climate. The animal does not need as much protection. This is clearly shown on the coat of wild furbearing animals, such as the otter, the beaver, etc.

The local markets in Florida easily consume all the mutton now available. There is always a ready sale for wool. As the ewes lamb in December and January, Florida is the finest place in the United States to furnish spring lamb for market.

LIVE STOCK FARMING IN F'LORID



Would Cross Herefords and Native Cattle

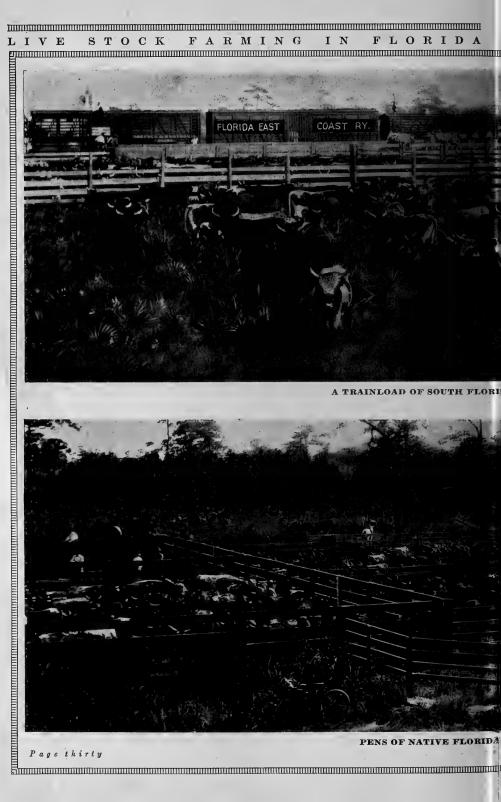
MR. U. J. WHITE, of St. Augustine, an authority on livestock raising, who is mentioned elsewhere in this booklet, believes that a cross between pure-bred Hereford cattle and native stock, to be followed by still more improvement in the breed, will result in the best beef cattle for Florida. In the case of hogs he favors beginning by crossing the native Florida hog with the Duroc-Jersey. He believes in breeding up to a high standard to realize the greatest profits.

Mr. White says that rape is the great feed crop for hogs—he has seen Florida hogs well fattened for market with rape as the principal feed and no grain used whatever. He considers that at the present time Florida offers an unusual opportunity to the livestock farmer by reason of the vast acreage of cut-over and turpentined lands which can be purchased for low prices and made to produce a great quantity and variety of forage crops and pasture grasses at a minimum expense.

Slaughtering Plants Will Come

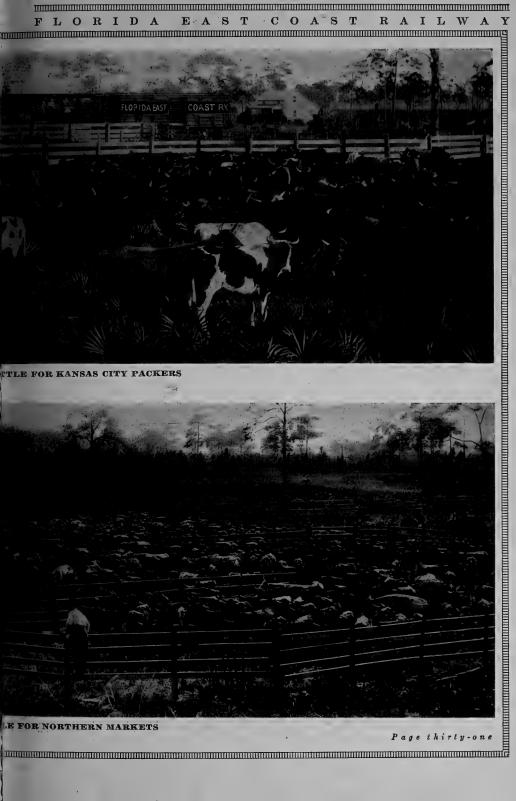
I is believed by many that the day is not far distant when some one or more of the big western packers will establish slaughtering plants in Florida. About a year ago what might be termed the first step in that direction was taken when stockyards were established in Jacksonville. It is certain that the big packers are paying close attention to Florida in the belief that it will become one of the greatest beef, pork and mutton producing states in the Union in the near future. Not long ago the writer was informed by a representative of one of the leading packers in the United States that his company as well as two or three others had livestock buyers on duty in Florida. He said further: "Until there is an up-to-date slaughtering plant built in Jacksonville, the stock raisers are competing successfully, as it is our opinion stock can be raised as cheaply in Florida as anywhere else in the country. Our livestock raisers are competing successfully on cattle, as is evidenced by western packers sending buyers here and

LIVE STOCK FARMING F L I N ORID



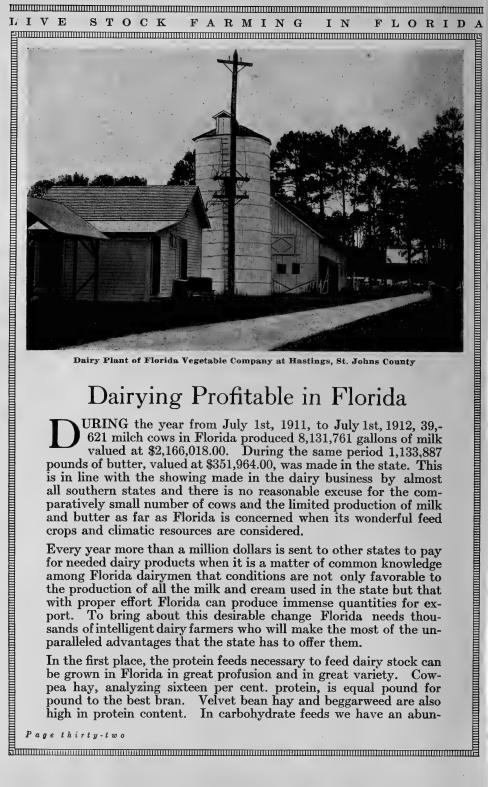


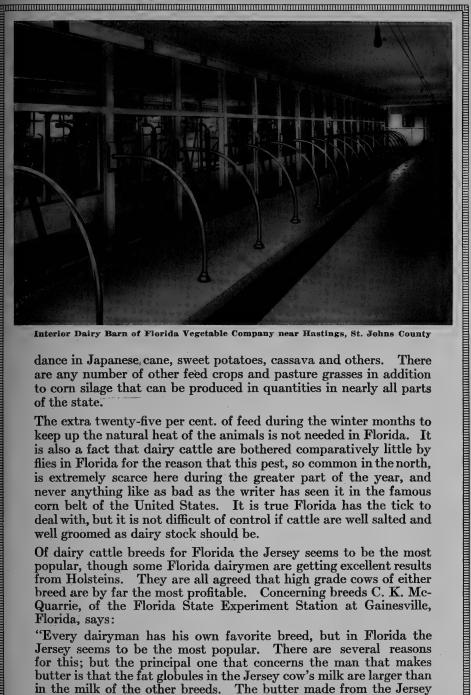
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Interior Dairy Barn of Florida Vegetable Company near Hastings, St. Johns County

dance in Japanese, cane, sweet potatoes, cassava and others. are any number of other feed crops and pasture grasses in addition to corn silage that can be produced in quantities in nearly all parts of the state.

The extra twenty-five per cent. of feed during the winter months to keep up the natural heat of the animals is not needed in Florida. It is also a fact that dairy cattle are bothered comparatively little by flies in Florida for the reason that this pest, so common in the north, is extremely scarce here during the greater part of the year, and never anything like as bad as the writer has seen it in the famous corn belt of the United States. It is true Florida has the tick to deal with, but it is not difficult of control if cattle are well salted and well groomed as dairy stock should be.

Of dairy cattle breeds for Florida the Jersey seems to be the most popular, though some Florida dairymen are getting excellent results from Holsteins. They are all agreed that high grade cows of either breed are by far the most profitable. Concerning breeds C. K. Mc-Quarrie, of the Florida State Experiment Station at Gainesville, Florida, says:

"Every dairyman has his own favorite breed, but in Florida the Jersey seems to be the most popular. There are several reasons for this; but the principal one that concerns the man that makes butter is that the fat globules in the Jersey cow's milk are larger than in the milk of the other breeds. The butter made from the Jersey

cow's milk stands up better in warm weather, and will not turn oily as soon as that from other breeds, while its texture is good all the way through. From personal experience I prefer a high-grade Jersey, about seven-eighths Jersey and one-eighth native. This grade of cow will give you a hardy animal that is a good forager when turned to pasture or on the range. Its milking capacity will, in most cases, equal that of the pure stock, and as a general rule it will produce milk at less cost than the pure Jersey. Such animals do not require the same care and pampering as the thoroughbred, and cold and wet spells of weather do not affect their milk production so much. Anyone wishing to get good results and build up a herd of good animals can easily do so by keeping a full blood Jersey bull, and so grading up his herd. This bull should be changed every four or five years to prevent in-breeding. Every dairyman should raise his own cows by selecting the best of his heifer calves. By doing this he can build up a herd of a certain type, and can select the best milkers as they develop their milking qualities, while those not coming up to the mark can be sold off."

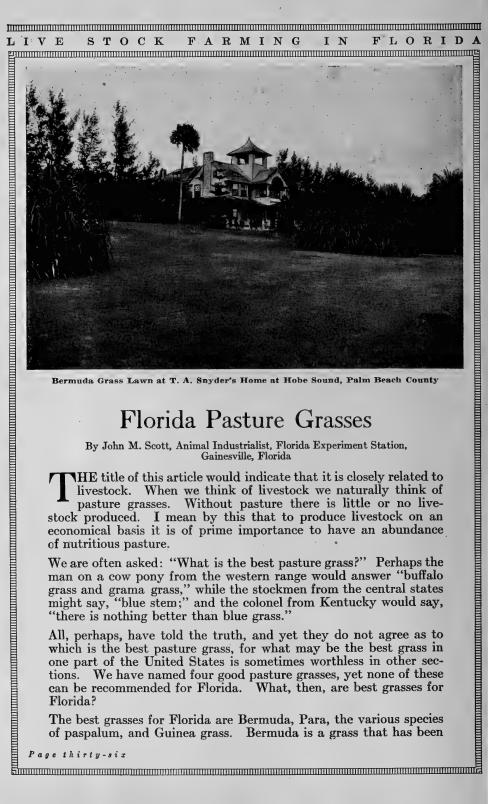
In a recent issue The Florida Farmer and Homeseeker says:

"It is safe to say that no greater opportunity exists in Florida today than that which is open to the dairy farmer. The demand for dairy products in almost every section of the state far exceeds the supply during every month in the year and the result is good prices to the producer all the time. Prices vary according to the extent of the demand. During the summer good dairy butter is sometimes sold for as low as thirty-five cents per pound while the price runs to fifty cents and above during the winter season. Fresh milk brings from ten to twenty cents per quart; cream, thirty to forty cents per pint, and there is invariably a market for buttermilk at the soda fountains and in private families.

"There is no lack of feed for the Florida dairy herd that can be produced right on the farm. In many sections

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abused in all manner of ways; had it not been such a good grass, it would have died long since of despair. Grasses that are easily eradicated are, as a rule, injured to a considerable extent by grazing. A grass that will stand continuous tramping and daily grazing must have good staying qualities or it will soon disappear. Bermuda grass has many qualities to recommend it. It is a very nutritious grass; it starts growth early in the spring and continues until late in the fall; it is not killed by cold here in Florida; its habit of growth is such that it soon makes a good sod, which is not easily injured by stock tramping over it. It has the staying qualities that few other grasses can boast of. It is propagated from stem and root cuttings and also from seed. Perhaps the most satisfactory way of planting Bermuda is to use the stems and roots; these should be cut up into small pieces and scattered broadcast over the ground to be planted. The land can then be plowed. There is perhaps only one main objection to Bermuda grass. On thin, sandy land, stock keep it grazed close to the ground, and thus the animals are likely to get a good deal of sand, and in time become sanded. However, like other crops, it makes a better growth, and therefore furnishes more pasturage, when planted on good soil.

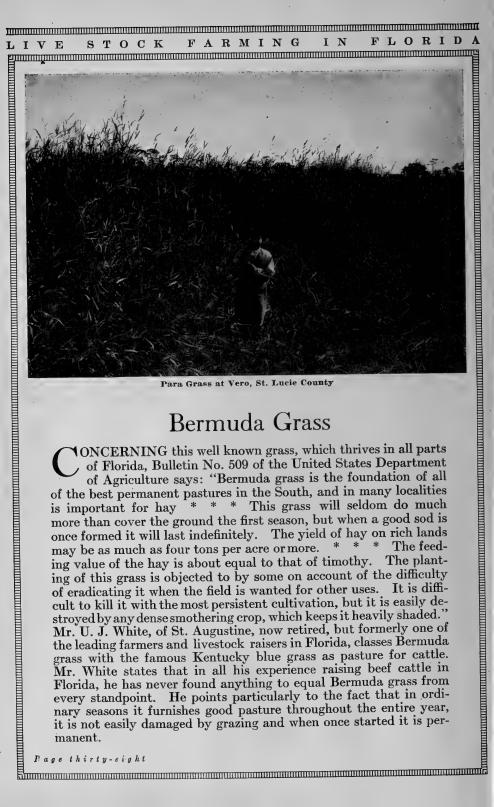
Para grass furnishes an abundance of good pasturage over a large portion of South Florida. It is a grass that is better adapted to the southern portion of the state than to the northern and western parts, because it is injured more or less by hard frosts. Para grass is of a much larger and ranker growth than Bermuda. It will grow in almost any class of soil. It flourishes and makes its best growth on wet, mucky land. However, it grows well and yields an abundance of good pasturage on almost any class of soil except real sandy, thirsty land, such as a "blackjack" ridge. Para grass is not only a good pasture grass, but it also makes good hay. It is propagated by planting. Like Bermuda grass, Para grass has a number of good qualities. However, it has one weak point, and that is it will be injured by hard frosts. In those sections of Florida where hard frosts are not likely to occur, Para grass will perhaps be as satisfactory a pasture grass as Bermuda. On good land it will grow to a height of five or six feet or more. When it makes such a big growth, the stems are, as a rule, hard and woody. such cases Para grass is not of much value for pasture except when it is kept grazed close to the ground.

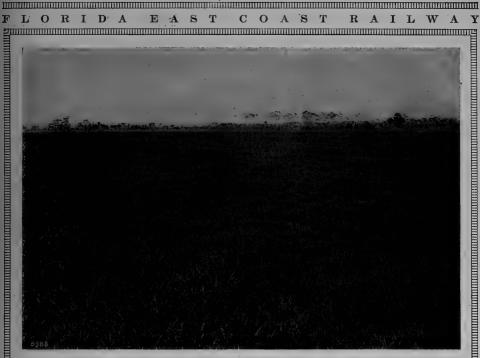
Here in Florida we find a large number of species of paspalum. A number of these furnish excellent pasturage whenever a good sod can be established. They are propagated by sowing the seed. The best of these are worthy of a trial on every farm in the state.

Guinea grass is another tall, rank growing grass that does well in the southern part of the state. Like Para grass, it is injured by hard frosts. When grown under congenial surroundings, Guinea grass produces a heavy growth of pasturage.

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FLORID





Rhodes Grass Pasture at Fellsmere, St. Lucie County

Rhodes Grass

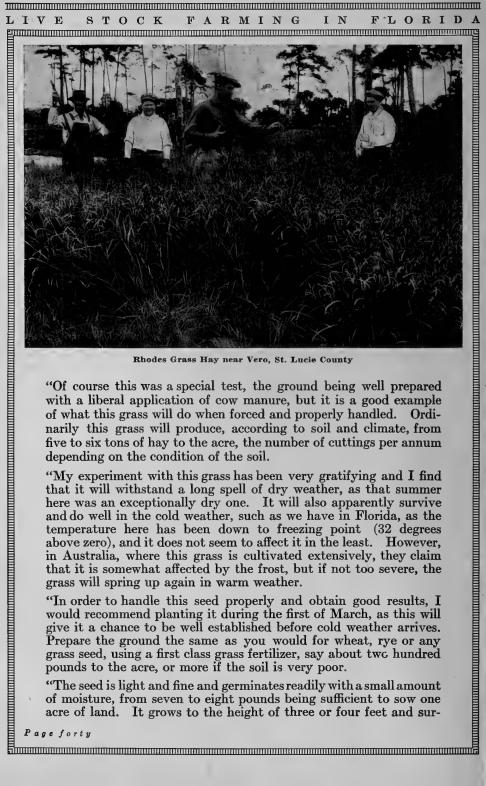
NE of the best all-purpose grasses for Florida livestock is Rhodes grass, or East Coast grass, as it was named by Mr. J. A. McGuire, of St. Augustine, who introduced it into Florida. Mr. McGuire first learned of this grass in 1910, and finally succeeded in procuring a small quantity of the seed direct from New South Wales, Australia, where it had been introduced through Cecil Rhodes from South Africa.

Concerning this grass, Mr. McGuire makes the following statement: "On April 28, 1911, I sowed four pounds of East Coast or Rhodes grass seed on one-eighth of an acre of ground, using plenty of cow manure, and took therefrom five cuttings as follows:

First cutting, June 6th, producing 280 pounds cured hay. Second cutting, June 29th, producing 960 pounds cured hay. Third cutting, September 2nd, producing 955 pounds cured hay. Fourth cutting, October 6th, producing 560 pounds cured hay. Fifth cutting, December 14th, producing 450 pounds cured hay.

"The above five cuttings were taken within eight months after planting, producing a total of 3,205 pounds of cured hay, which indicates that an acre of land cultivated in the same manner and planted in the same proportion will produce in the same time 25,760 pounds or about thirteen tons of cured hay.

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vives long periods of drought, yielding a most nutritious fodder which is relished with sorghum, and as our experiment demonstrates, excels timothy, clover and even alfalfa."

Since Mr. McGuire introduced East Coast or Rhodes grass, the truth of his statements in the foregoing has been proven many times in various parts of Florida. Mr. McGuire states that he has found that it grows better in a soil with an abundance of lime in its makeup. This led him to have one of the fertilizer factories make up a special mixture for it, consisting of one-third lime and two-thirds grass fertilizer.

Briefly, a field of Rhodes grass properly sown and cared for, furnishes the best of pasture or cured hay for horses and cattle. It compares very favorably in nutrition with timothy and alfalfa. Mr. McGuire is of the opinion that by far the best results are obtained from using imported seed instead of domestic.

Other Grasses

RAB grass is of considerable importance as a volunteer hay crop especially on sandy soils. It makes its growth late in the season, on lands from which early crops, like melons or potatoes, have been taken, and makes a good growth in fields of cowpeas, where it adds largely to the yield of hay. It is said to be somewhat difficult to cure, but when properly handled makes a good quality of hay. It is always a volunteer crop and need never be sown.

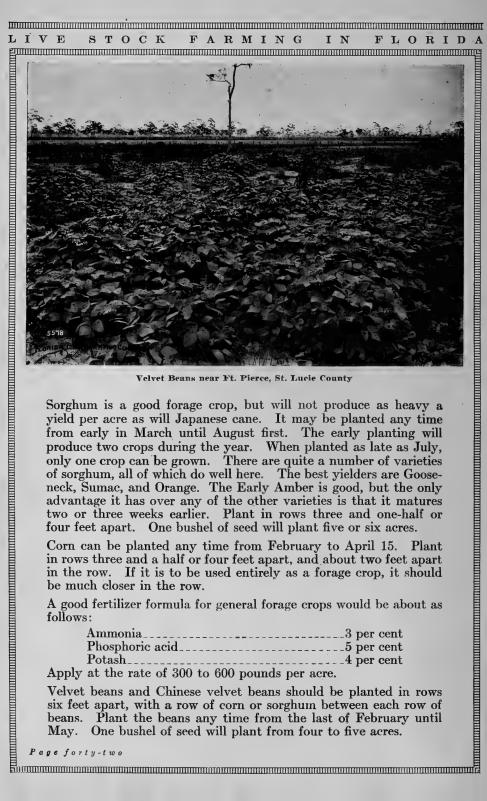
Natal grass, from South Africa, is much like crab grass in habit of growth, but where the soil is very sandy it makes a heavier yield of better hay. It has become thoroughly established in parts of Florida. It will not stand heavy frosts, but from Central Florida southward it becomes perennial and is used some for permanent meadows. Farther north it is an annual, making a volunteer growth in fields from which early crops have been gathered and often producing a heavy growth in corn fields after cultivation ceases.

Para grass and Guinea grass, both common to part of Florida, are dwelt upon on another page in this booklet.

Florida Forage Crops

PERHAPS the best forage crops for Florida are Japanese cane, sorghum, corn, velvet beans, Chinese beans, Yokohama beans, cowpeas, and beggarweed. Japanese cane is propagated by cuttings. It can be planted any time from November to April. It requires about three thousand whole canes to plant an acre. Before planting, cut the canes into pieces about one and a half feet long. Plant in rows from six to eight feet apart, and drop the canes in a double line in the row. Cover the canes from three to four inches deep. Give good cultivation from early spring until midsummer.

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Ammonia3	
Phosphoric acid5	per cent
Potash4	per cent

Yokohama beans mature in about one hundred and twenty days, and hence can be planted at almost any time from early spring until the last of June. They do not make as rank a growth as do the velvet and Chinese, and hence can be planted in rows about two and a half feet apart, and from eight to ten inches in the row.

Cowpeas, if for hay, should not be planted until July. Planted at that time they will be ready to harvest after the fall rains. Plant in rows two and a half feet apart and three to six inches apart in the row.

The beans and cowpeas mentioned above will not require fertilizing to produce a good crop.

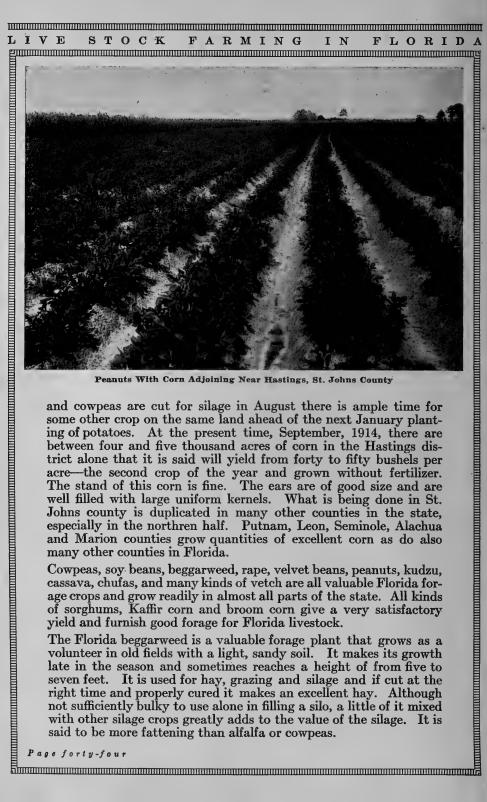
A favorite feed for cattle in many parts of Florida is German millet. It yields heavily and grows rapidly. Near Malabar, Florida, on the central East Coast, a field of German millet grew to a height of four feet six weeks after sowing. The crop was then cut and six weeks later another crop was ready to harvest. This was the experience of Mr. W. Huebner, of Malabar, and the millet was grown on sandy soil without the aid of fertilizer.

Corn and Japanese cane take the first rank in Florida as ensilage crops. Every one knows the value of corn in this respect. Japanese cane makes good silage. It keeps well, is relished by cattle, and the yield that can be secured makes it one of the most economical crops that the Florida farmer can grow for silage. It is also a valuable crop for dry winter forage. It is easy to cure and the loss in storage is small. In a recent test at the Florida Experiment Station at Gainesville, Japanese cane was used as roughage in feeding for beef production. In this test the following feeds, per 1,000 pounds live weight, were fed: corn 12.50; velvet beans in the pod, 18.75; sweet potatoes, 20.8; and Japanese cane, 12.50 pounds. During a period of sixty days the steers made a daily average gain per 1,000 pounds live weight of 6.5 pounds, at a cost of four cents per pound of gain. Japanese cane is a crop suited to a variety of soils. Good hammock land will no doubt produce the heaviest yields. But even the high pine lands will give good results when properly ferti-On swampy muck land Japanese cane will make a fairly good growth. On such land the growth will be greatly increased by an application of lime (ground limestone or burnt lime).

The growing of a high grade of corn in Florida with substantial yields per acre, has long since ceased to be an experiment. Experts state that any soil which will produce a good crop of cotton will also produce good corn. At the present time excellent corn crops are produced in many counties in the northern half of Florida.

The common practice in the famous Hastings Irish potato district of St. Johns county is to plant potatoes with commercial fertilizer in January. Early in the spring, corn follows the potatoes in the same fields and not a bit of additional fertilizer is used. Cowpeas are planted with the corn two or three months later, and if the corn

IVE STOCK FARMING IN FLORID





Duroc-Jersey Sow and Pigs near Hastings, St. Johns County

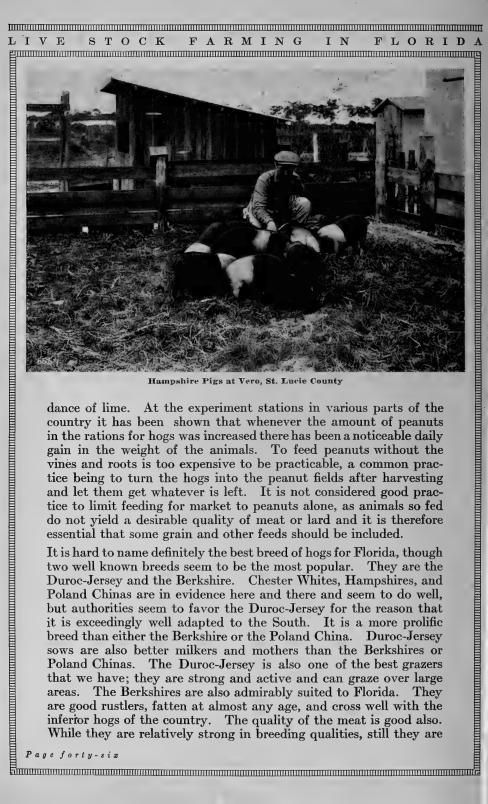
Money in Florida Hogs

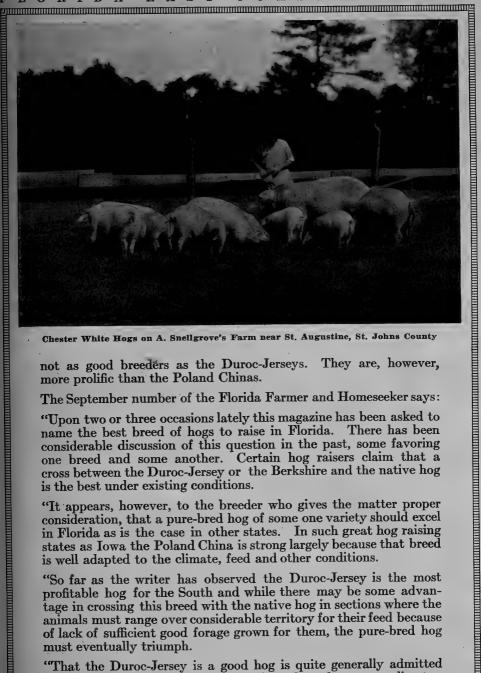
THERE is no doubt in the minds of those who are engaged in that pursuit but that there are excellent profits awaiting the Florida farmer who raises hogs for market. The local demand for fresh pork is strong at all times of the year and particularly during the fall, winter and spring, when it brings very attractive prices. The day of the "razor-back" in Florida is past. Florida's leading livestock men have adopted for their slogan "Improve the breeds," and with the many advantages that the state offers in the way of cheap feed crops, mild climate, good local markets, etc., it seems that the business of raising hogs in this state cannot result otherwise than profitably to those who engage in it.

One of the best forage crops in Florida for hogs is Dwarf Essex Rape. It has an unusually high feeding value and is used to good advantage in fattening hogs for market. Some stockmen have had great success with rape alone in this respect, but experiments have shown that it gives best results when combined with grain. Another excellent green feed for Florida hogs is cowpeas. This is perhaps Florida's leading legume and it is readily grown in all parts of the state.

The greatest fattener for hogs that is grown in Florida is the peanut, which yields exceptionally well in grey sandy soils with an abun-

STOCK FARMING IN FLORID





Chester White Hogs on A. Snellgrove's Farm near St. Augustine, St. Johns County

not as good breeders as the Duroc-Jerseys. They are, however, more prolific than the Poland Chinas.

The September number of the Florida Farmer and Homeseeker says:

"Upon two or three occasions lately this magazine has been asked to name the best breed of hogs to raise in Florida. There has been considerable discussion of this question in the past, some favoring one breed and some another. Certain hog raisers claim that a cross between the Duroc-Jersey or the Berkshire and the native hog is the best under existing conditions.

"It appears, however, to the breeder who gives the matter proper consideration, that a pure-bred hog of some one variety should excel in Florida as is the case in other states. In such great hog raising states as Iowa the Poland China is strong largely because that breed is well adapted to the climate, feed and other conditions.

"So far as the writer has observed the Duroc-Jersey is the most profitable hog for the South and while there may be some advantage in crossing this breed with the native hog in sections where the animals must range over considerable territory for their feed because of lack of sufficient good forage grown for them, the pure-bred hog must eventually triumph.

"That the Duroc-Jersey is a good hog is quite generally admitted and there is no question as to his being adapted to warm climates. Perhaps the following description of his good qualities by Geo. W.



Bolds, of Louisana, in Modern Farming, will serve to give our readers a clear idea of why many experienced breeders think he is the best hog for Florida:

"T have tried the pure-bred hog business with the Berkshire, Poland Chinas, Yorkshires and Duroc-Jersey, and had to admit from except the state of th

Wool and Mutton a Source of Profit

It is not necessary to look up statistics to be convinced of the fact that the consumption of mutton per capita, in the United States, is steadily increasing every year and it is also true that the demand for wool will increase more rapidly from year to year than it is produced. It follows, therefore, that the business of sheep raising under proper management should be profitable wherever it is adapted to climate and feed crops and is afforded an accessible market. Florida possesses these requirements. In fact, she has sufficient resources to produce hundreds of thousands of dollars' worth of mutton and wool profitably. This is the opinion of experienced sheep raisers, who are meeting with good success in the business in this state at the present time, as well as some of the foremost authorities on the subject outside of Florida.



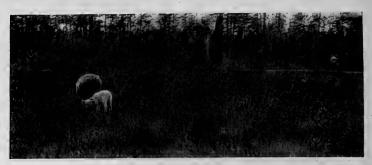
Flock of Sheep in Volusia County

In countries where economy in farm management has been studied a long time, the sheep is considered necessary in utilizing vegetation on such waste lands as are not wet or marshy. But the sheep can hold its place on high-priced land as a meat producer alone. First, the lambs mature very rapidly, being marketable at four months of age or later, according to breeding and feeding. This is an economy, because a larger proportion of the total feed goes into increase of weight than in slower growing animals. Second, sheep consume a greater variety of plants than do other animals. Many of such plants are detrimental to pastures and would otherwise require hand labor to hold them in check. Third, grain waste in harvesting can be entirely recovered by sheep. These facts prompt some farmers to claim that the summer food of sheep costs nothing, because what they consume would otherwise bring no returns.

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LIVE STOCK FARMING IN FLORIDA

Compared with hogs, the sheep has an advantage in the wider variety of materials it consumes. Being a ruminant it makes its gain with a minimum of grain and expensive concentrates. Cowpeas, rape, soy beans, vetches, and any number of pasture grasses that thrive in Florida furnish the best of feed for sheep. Not long ago



Ewe and Lamb on Pine Land near Tallahassee, Leon County

W. J. Clarke, editor of the Shepherd's Journal, of Chicago, spent some time in Florida investigating its possibilities as a sheep raising state. Among other things, Mr. Clarke says:

"During my itinerary I traveled, possibly hundreds of miles, through lands in the vicinity of Tallahassee, and other cities, and have seen thousands of acres of land which I feel sure would make splendid sheep ranches. I know from observation that such crops as are conducive to the raising of high class sheep can be raised almost any-* * Were I to locate in Florida with where on these lands the necessary capital and the desire to make from six to fifteen per cent. on my operations and fifty to one hundred in due course of time on my original investment by the sale of my land, my ambition would be to secure a large tract of land with the ultimate view of its becoming a large, well-pastured sheep ranch, which I would use for that purpose until the land was badly wanted for pecan nuts or fruit growing, and too valuable for sheep raising, which I believe in a few years it would unquestionably be. From this large tract of land I would select a few hundred acres upon which I would establish an early lamb raising establishment. thing that I would do towards bringing my land into condition for my early lamb plant would be to sow the land intended for this purpose to mustard, as it takes but thirty-five days for this plant to mature and it makes good sheep feed or a good crop to plow under as a fertilizer. Mustard is used in this way in England.

"I would raise humus supplying legumes, such as the velvet bean, cowpea and beggarweed. All make good sheep feed and are splendid for plowing under. Rape, kale, cabbage, vetches, turnips and all such crops grow splendidly in the South and should give as good results as in the south and west of England because of the lack of

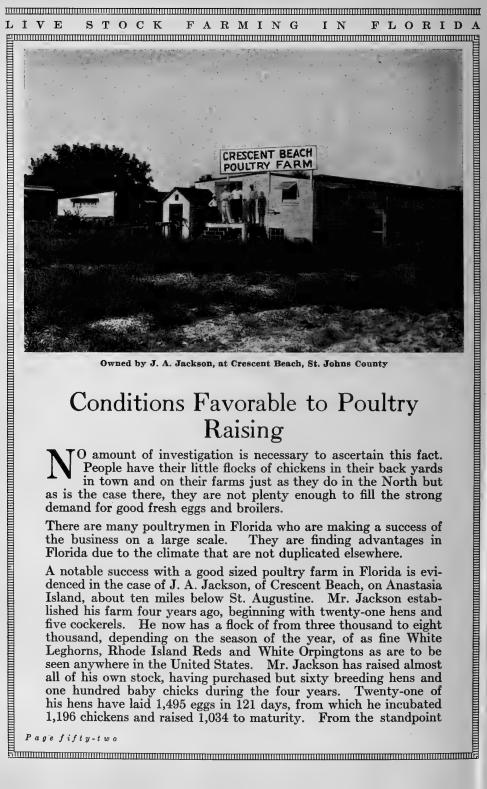
After I had grown on my farm such forage crops as I know from practical experience to be valuable for sheep raising, especially early lamb raising, I would buy a few hundred head of the common "piney woods" ewes and cross them with rams of some of the improved mutton breeds. By way of establishing a flock of early lamb raisers I would take as many of these ewes as I could get and breed a large portion of them to a Dorset or Tunis ram with a view of establishing a flock of ewes that would inherit the early-lambing tendencies of these breeds. * * * For raising early lambs I do not see why any country in the world could surpass Florida, for as I have said before, it surely has a wonderful climate and the land seems to grow roots, cabbage, corn, cowpeas and such like crops just as easily as growing weeds. I have it upon good authority that oats, rape and peas make a wonderful growth when sown together. * There is no necessity of housing the ewes or the lambs, nor need of clover hay. The ewes would do well enough on the ordinary herbage of the country in the spring and summer months after the lambs are taken from them, and the roots and forage crops, etc., and the mild climate would surely produce a lamb that should vie with that raised anywhere. There is a good home market for spring lamb in Tallahassee, and, of course, Jacksonville and other southern cities. Any surplus could be shipped to New York and other large cities. As the ewes lamb early and the lambs cannot fail to be fat and ripe with good milking mothers and plenty of succulent rations, a really first-class article could be furnished. * * * Mr. C. E. Bradley established a small flock of pure-bred Dorsets on his farm near Tallahassee and raised early lambs which he sold to his friends at twenty-five cents per pound, which, although not a big price for this toothsome article, shows what can be done in the neighborhood of Tallahassee and other

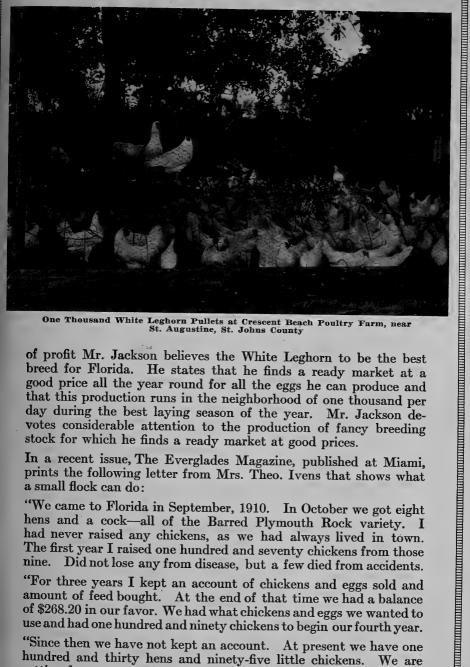


Leon County Ewes and Lambs

points in Florida in this business. One feature which appeals to me in the early lamb business in Florida is that the forage crops most suitable for early lamb raising are at their best in the fall and winter when the ewes and lambs need them most. After the lambs are taken from the ewes, the ewes could be turned loose on the range."

OCK FARMING





One Thousand White Leghorn Pullets at Crescent Beach Poultry Farm, near St. Augustine, St. Johns County

of profit Mr. Jackson believes the White Leghorn to be the best breed for Florida. He states that he finds a ready market at a good price all the year round for all the eggs he can produce and that this production runs in the neighborhood of one thousand per day during the best laying season of the year. Mr. Jackson devotes considerable attention to the production of fancy breeding stock for which he finds a ready market at good prices.

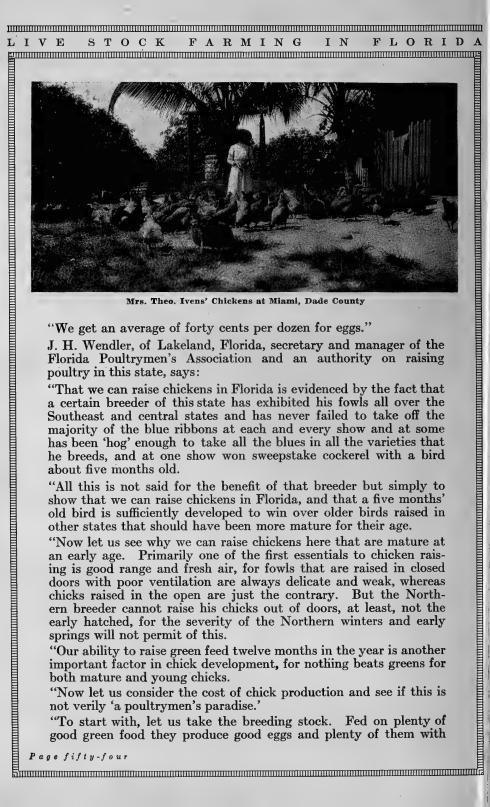
In a recent issue, The Everglades Magazine, published at Miami, prints the following letter from Mrs. Theo. Ivens that shows what a small flock can do:

"We came to Florida in September, 1910. In October we got eight hens and a cock-all of the Barred Plymouth Rock variety. had never raised any chickens, as we had always lived in town. The first year I raised one hundred and seventy chickens from those nine. Did not lose any from disease, but a few died from accidents.

"For three years I kept an account of chickens and eggs sold and amount of feed bought. At the end of that time we had a balance of \$268.20 in our favor. We had what chickens and eggs we wanted to use and had one hundred and ninety chickens to begin our fourth year.

"Since then we have not kept an account. At present we have one hundred and thirty hens and ninety-five little chickens. getting from seventy-five to ninety-five eggs each day.

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FLORIDA EAST COAST RAILWAY



Breeding Pens at Crescent Beach Poultry Farm, St. Johns County

the strongest vitality possible in the germ, which in turn produces strong, healthy chicks that grow off into fine robust specimens; thus insuring the health of the breeders. This green food should be one-half of a chick's diet and can be supplied in the form of collards, cabbage, lettuce, celery tops, rape, rutabaga, etc., and can be grown at a very minimum of expense. Green food not only furnishes nourishment but bulk also, which is essential to a chick and helps to keep down the grain bill; hence the cost of production in the feeding end of the game is no more, or even less than the cost of feeding chicks where the grain grows.

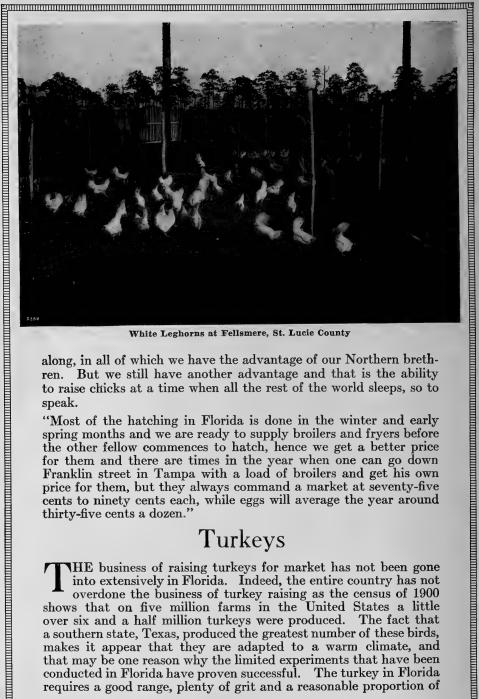
"The next item of expense to consider is the incubation and brooding.

"If this is done by artificial means then one can readily understand why in this climate, where we seldom have any cold weather, the cost of operating an incubator is very little, for the flame need not be turned up very high as there is no outside temperature to combat.

"The same condition holds good in operating the brooders, for we need only a small flame in the lamp and that only for a few days or a week at the most, then the chicks can take care of themselves; and in the spring of the year a fireless brooder will answer the purpose to a nicety.

"We have now cut down the feed bill and the cost of incubation and brooding and should be on our way to have a nice flock coming

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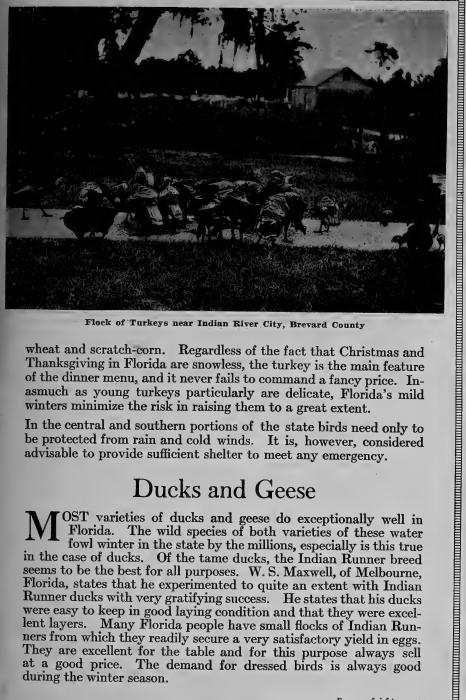
White Leghorns at Fellsmere, St. Lucie County

along, in all of which we have the advantage of our Northern brethren. But we still have another advantage and that is the ability to raise chicks at a time when all the rest of the world sleeps, so to speak.

"Most of the hatching in Florida is done in the winter and early spring months and we are ready to supply broilers and fryers before the other fellow commences to hatch, hence we get a better price for them and there are times in the year when one can go down Franklin street in Tampa with a load of broilers and get his own price for them, but they always command a market at seventy-five cents to ninety cents each, while eggs will average the year around thirty-five cents a dozen."

Turkeys

THE business of raising turkeys for market has not been gone into extensively in Florida. Indeed, the entire country has not overdone the business of turkey raising as the census of 1900 shows that on five million farms in the United States a little over six and a half million turkeys were produced. The fact that a southern state, Texas, produced the greatest number of these birds, makes it appear that they are adapted to a warm climate, and that may be one reason why the limited experiments that have been conducted in Florida have proven successful. The turkey in Florida requires a good range, plenty of grit and a reasonable proportion of



Flock of Turkeys near Indian River City, Brevard County

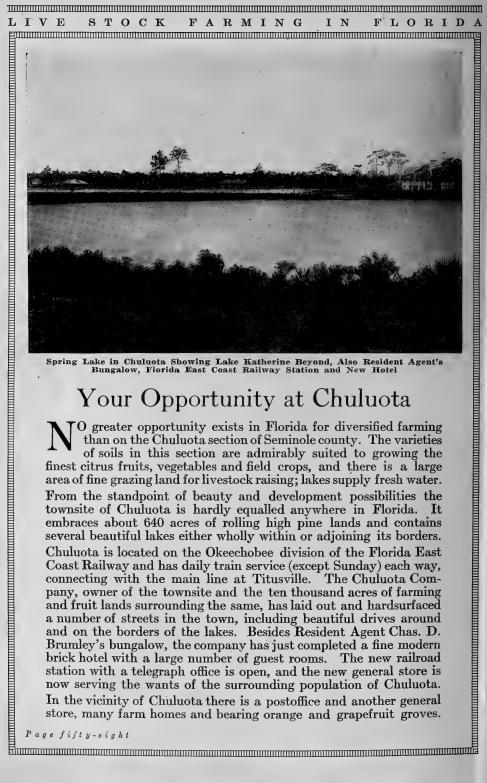
wheat and scratch-eorn. Regardless of the fact that Christmas and Thanksgiving in Florida are snowless, the turkey is the main feature of the dinner menu, and it never fails to command a fancy price. Inasmuch as young turkeys particularly are delicate, Florida's mild winters minimize the risk in raising them to a great extent.

In the central and southern portions of the state birds need only to be protected from rain and cold winds. It is, however, considered advisable to provide sufficient shelter to meet any emergency.

Ducks and Geese

OST varieties of ducks and geese do exceptionally well in Florida. The wild species of both varieties of these water fowl winter in the state by the millions, especially is this true in the case of ducks. Of the tame ducks, the Indian Runner breed seems to be the best for all purposes. W. S. Maxwell, of Melbourne, Florida, states that he experimented to quite an extent with Indian Runner ducks with very gratifying success. He states that his ducks were easy to keep in good laying condition and that they were excellent layers. Many Florida people have small flocks of Indian Runners from which they readily secure a very satisfactory yield in eggs. They are excellent for the table and for this purpose always sell at a good price. The demand for dressed birds is always good during the winter season.

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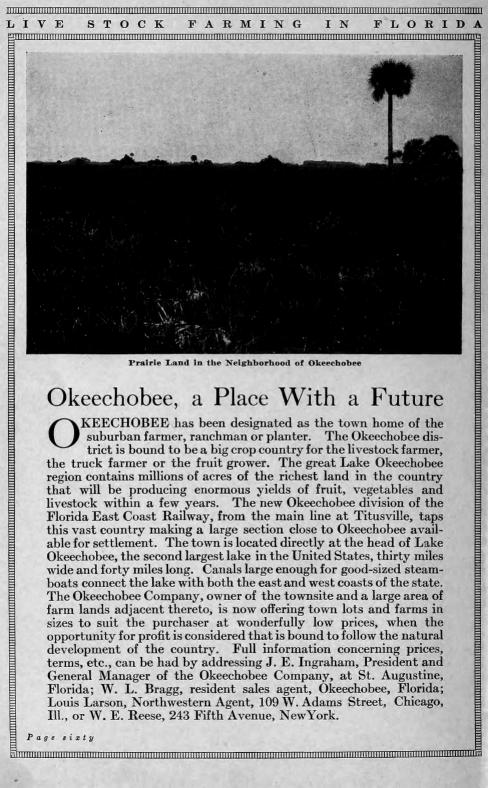
A Hardsurfaced Road Leading Into Chuluota. Railroad Agent's Cottage at the Right

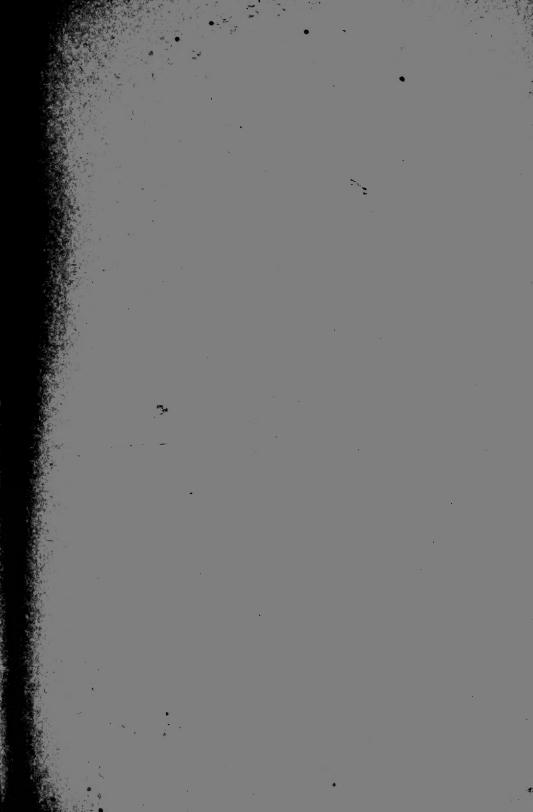
Further information may be obtained from Mr. J. E. Ingraham, President of the Chuluota Company, and Vice-President of the Florida East Coast Railway Co., St. Augustine, Florida; W. E. Reese, 243 Fifth Avenue, New York; Louis Larson, 109 W. Adams Street, Chicago, Ill., or Charles D. Brumley, resident agent of the Chuluota Company, Chuluota, Florida.

Kenansville

ALUABLE farming and fruit lands surround this new town on the newly constructed Okeechobee division of the Florida East Coast Railway. Kenansville is located in the east central part of Osceola county adjacent to the famous Kissimmee valley cattle range. The land about Kenansville is divided into five and ten-acre tracts and is being sold readily by the Okeechobee company at very reasonable prices; the location is decidedly healthy and the lands are highly productive. The place is ideal for livestock farming. The Florida East Coast Railway has a new station at Kenansville and serves the town with daily train service (except Sunday) each way. Full information concerning prices, terms, etc., can be had by addressing J. E. Ingraham, President and General Manager of the Okeechobee Company, at St. Augustine, Florida; A. L. Hunt, resident sales agent, Kenansville, Florida; Louis Larson, Northwestern Agent, 109 W. Adams Street, Chicago Ill., or W. E. Reese, 243 Fifth Avenue, New York.

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